

South Dakota Tobacco Summary

2005 Youth Risk Behavior Survey

August 7, 2006

Executive Summary

Results from the 2005 South Dakota Youth Risk Behavior Survey (YRBS) indicate that most South Dakota high school youth do not smoke. Current use of cigarettes (one or more cigarettes in the past 30 days) decreased from 44% in 1999 to 28% in 2005. Use of spit tobacco in the past 30 days decreased from 15% in 2000 to 13% in 2005; however, 15% of high school youth still believe that spit tobacco is safer than cigarettes. Less than half of students report they were taught the dangers of tobacco use in class. Sixty-two percent of respondents were in the same room or car with someone who was smoking cigarettes in the past seven days.

Results

In order to determine the prevalence of cigarette, cigar, and spit tobacco (i.e., chewing tobacco and snuff) use among South Dakota high school students, the South Dakota Department of Education, Department of Health, and Department of Human Services conducted the South Dakota Youth Risk Behavior Survey (YRBS) in 2005. This report summarizes survey data for key indicators of progress towards reducing tobacco use among South Dakota high school students for the years 1999, 2001, 2003, and 2005. It also includes information regarding knowledge, attitudes, and beliefs about tobacco in South Dakota.

YRBS defines tobacco use in the following three ways:

- ***Ever Use*** is having ever tried cigarette smoking, even one or two puffs.
- ***Current Use*** is having smoked a cigarette on one or more of the past 30 days.
- ***Frequent Use*** is having smoked a cigarette on at least 20 of the past 30 days.

Use of Cigarettes Among South Dakota High School Students

Cigarette smoking is a definite cause of cancers of the lung and larynx, the bladder, esophagus, mouth and throat, heart disease, cerebro-vascular diseases, chronic bronchitis and emphysema. It is associated with increased risk for cataracts, pneumonia, acute myeloid leukemia, abdominal aortic aneurysm, stomach cancer, pancreatic cancer, cervical cancer, kidney cancer and periodontitis (MMWR, 2005). Approximately 90% of people who develop these cancers use some form of tobacco. If current patterns of smoking behavior persist, an estimated 6.4 million U.S. persons who were under the age of 18 in 2000 could die prematurely from smoking-related illnesses (Hahn et al., 2002). Approximately 100 South Dakotans will be diagnosed with oral cancer each year, accounting for 2.5% of all cancer diagnoses, and 25 will die each year (South Dakota Department of Health, 2005). The five year survival rate is 59%.

The data from 2005 indicates reductions in students reporting having ever tried cigarettes. The rate of ever use of cigarettes has decreased over time from 74% in 1999 to 61% in 2005. The current use of cigarettes decreased from 44% in 1999 to 28% in 2005. See Figure 1 and 2.

Figure 1

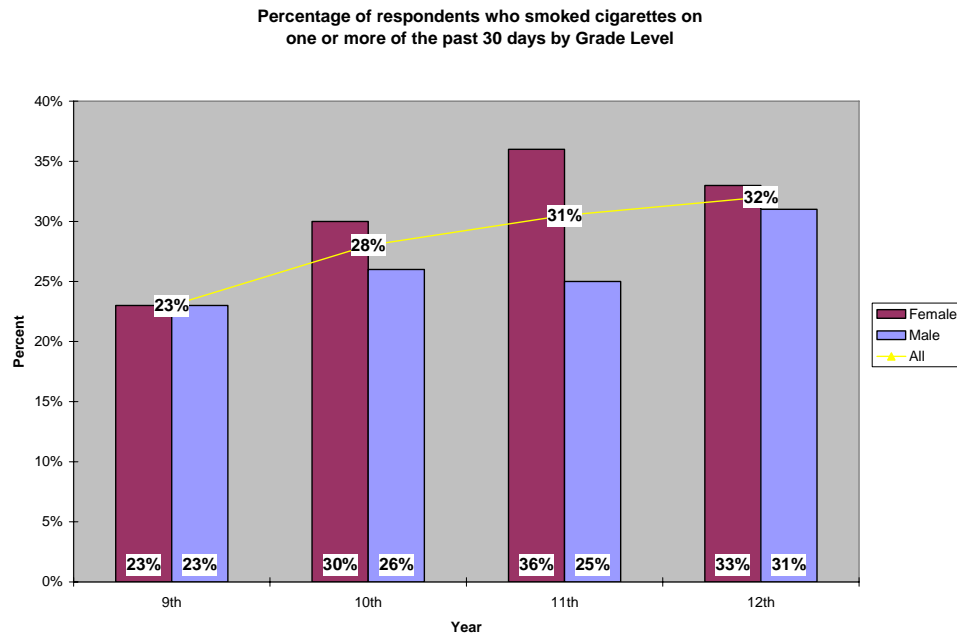
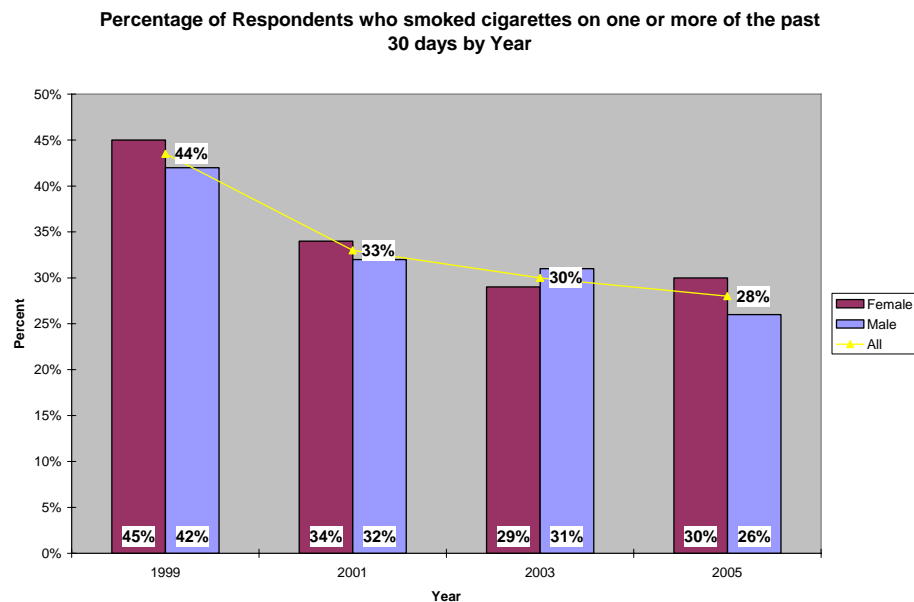


Figure 2



Of current smokers, 20% smoked daily, that is at least one cigarette everyday for 30 days. This percentage remained the same as compared to 2003 data; however, there has been a significant decrease in daily smoking from 1999 to present. See Figure 3 below.

Figure 3

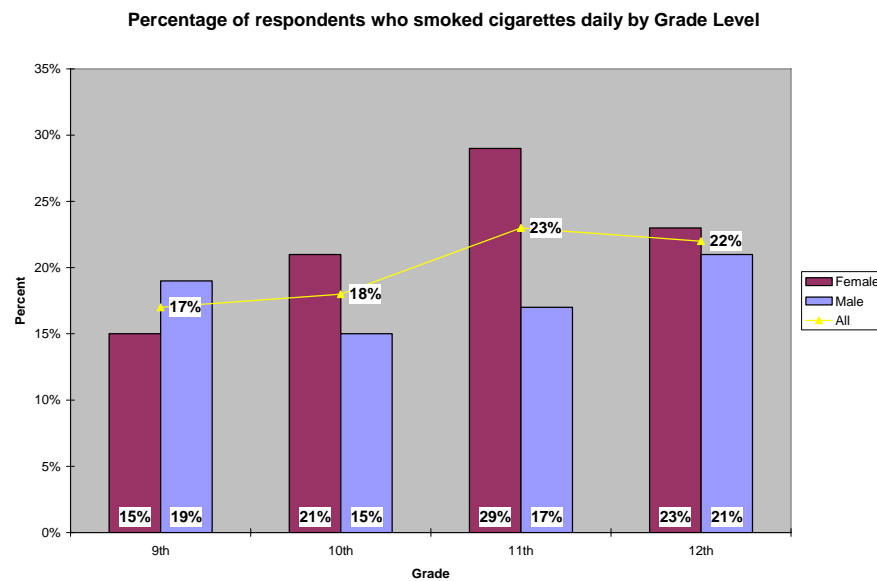


Figure 4

Studies suggest that quitting use of tobacco products

and leading a healthy lifestyle will reduce cancer

deaths by two-thirds (ACS, 2006).

Students who smoke frequently are a

subset of current smokers reported above,

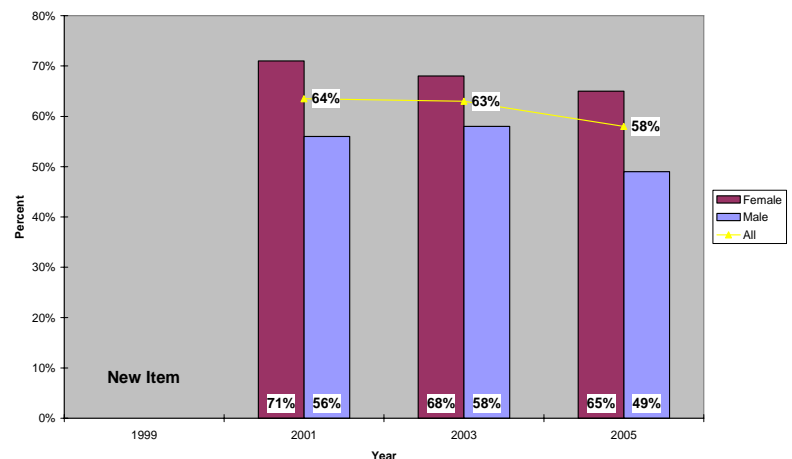
and they are more likely to be addicted to

nicotine and to become adult smokers. Of

those respondents who smoked in the past

thirty days, 58% have attempted to quit smoking in the past 12 months. See Figure 4.¹

Percentage of respondents who smoked cigarettes during the past 30 days who ever tried to quit smoking cigarettes during the past 12 months by Year



¹ no grade specific data are available because there were fewer than 100 males/100 female responses in each grade.

Use of Other Tobacco Products

Spit tobacco use primarily begins in adolescence (Kopstein, 2001). Approximately 75% of oral cavity and pharyngeal cancers are attributed to the use of smoked and smokeless (“spit”/ “chewing”/ “snuff”) tobacco. Use of smokeless tobacco also causes gum recession and an increased risk of heart disease and stroke (CDC, 2004). Oral cancer accounts for two to four percent of all cancers diagnosed annually in the United States, but relative survival rates are among the lowest of major cancers. Only half the number of persons diagnosed with oral cancer are alive five years after the diagnosis. In contrast to other cancers (e.g. breast, colorectal, and prostate cancers) the overall U.S. survival rate from oral and pharyngeal cancer has not improved during the past 16 years (CDC, 2004). Spit tobacco increases the risk of cancer of the cheek, gums, and inner surface of the lips by about 50 times. Often cancer associated with spit tobacco will begin as sores in the mouth, leukoplakia, or erythroplakia (American Cancer Society, 2006). Spit tobacco also causes gum recessions and an increased risk of heart disease and stroke (CDC, 2004).

The 2005 YRBS survey was the first to ask about ever having ever tried spit tobacco. Twenty-five percent of respondents indicated they had ever used spit tobacco during their lives. Data indicated that among high school students, use of spit tobacco in the past 30 days has decreased from 15% in 2000 to 13% in 2005. Current use of spit tobacco was reported by 20% of high school males and 5% of females.

See Figures 5 and 6.

Figure 5

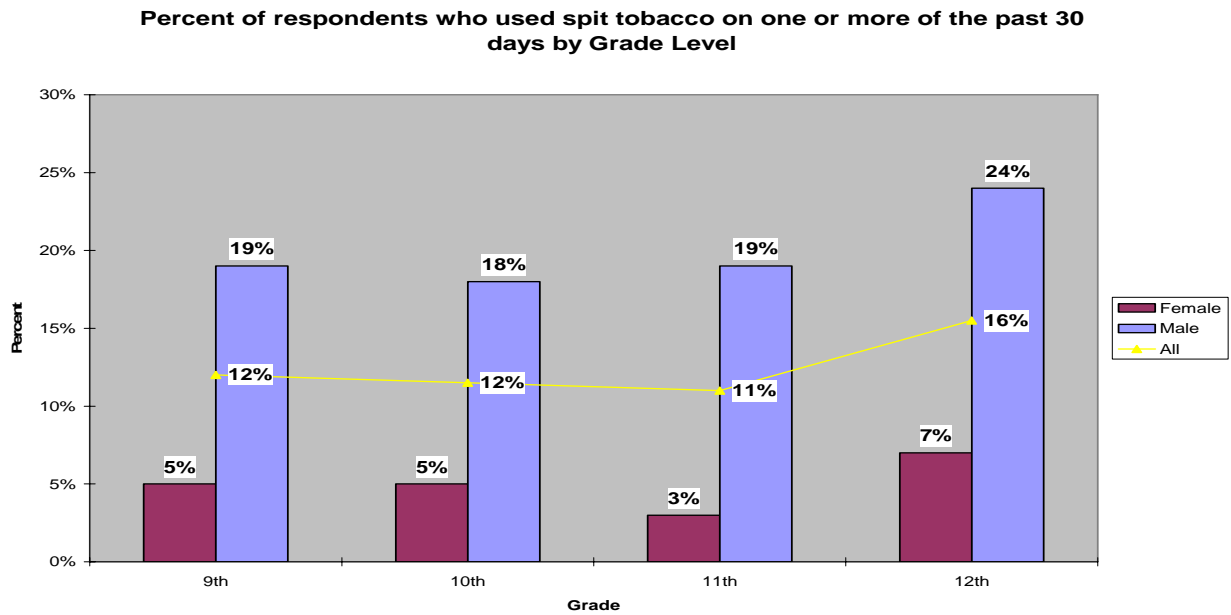
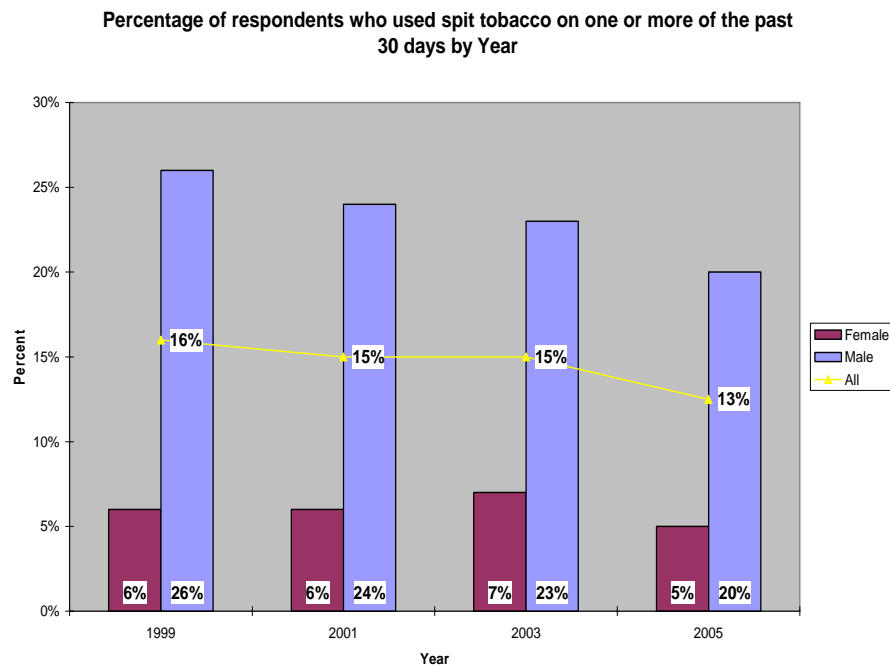


Figure 6



Fifteen percent of respondents believe that spit tobacco is safer than cigarettes. No trend data available are available as this was a newly added question in 2005. See figures 7 and 8.

Figure 7

Respondents that believe spit tobacco is safer than cigarettes

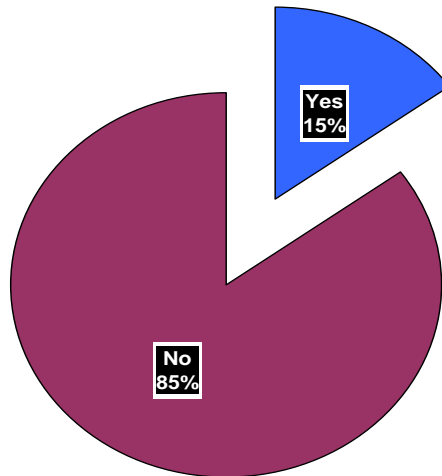
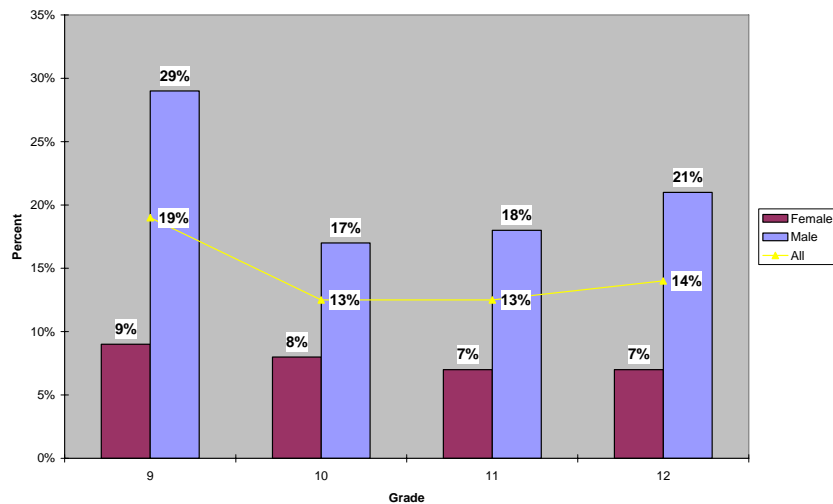


Figure 8

Believes spit tobacco is safer than cigarettes by Grade Level

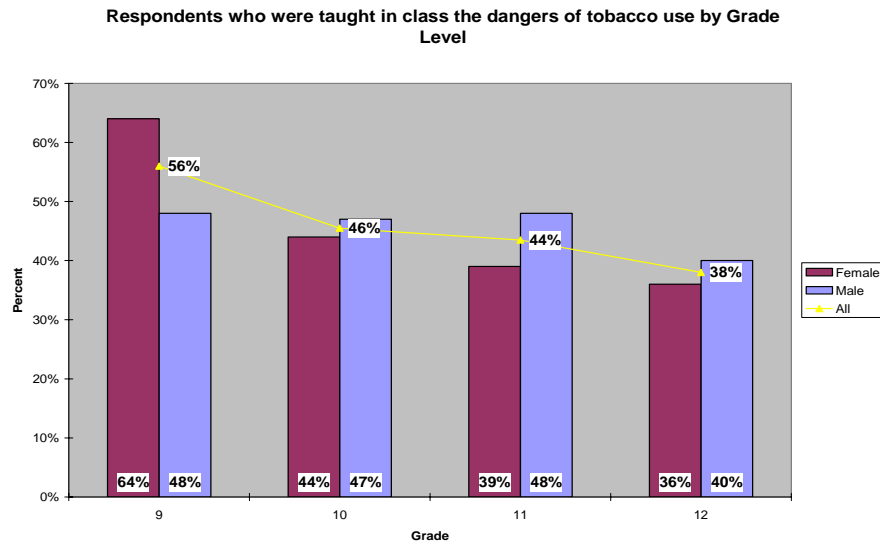


Less than half of students report they were taught the dangers of tobacco use in class.

There are not any trend data available as this was a newly added question in 2005. See

Figure 9.

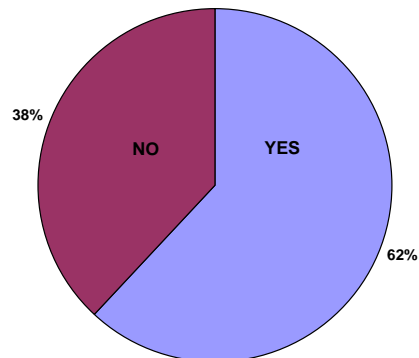
Figure 9



Sixty-two percent of respondents were in the same room or car with someone who was smoking cigarettes in the past seven days. See Figure 10.

Figure 10

Percentage of Respondents who during the past 7 days were in the same room or car with a smoker



Survey Methodology

The 2005 YRBS survey consisted of a random sample of 25 schools across South Dakota. The school sample was selected using PCSample software, which is a software program specifically designed for stratified YRBS school sampling. All public, private, and Bureau of Indian Affairs (BIA) schools in South Dakota with students in grades 9, 10, 11, or 12 were eligible to be selected for inclusion in the sample. Completed surveys were received from 22 of the 25 sampled schools for a school response rate of 88%.

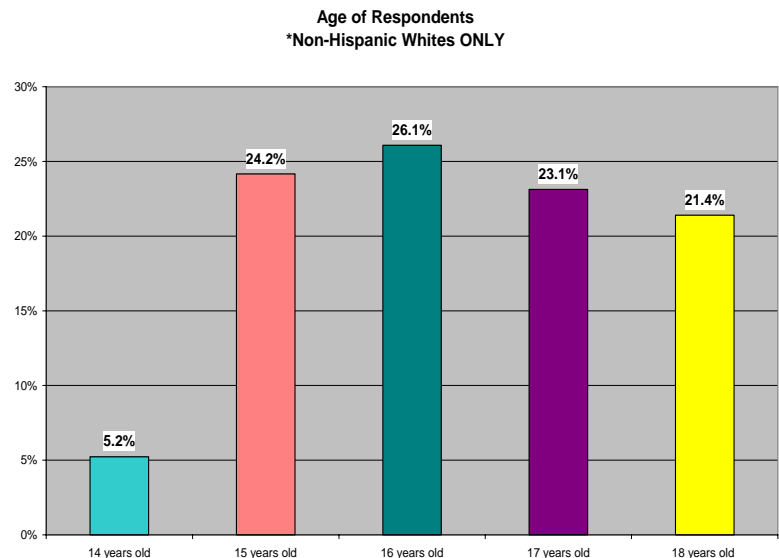
There were 1590 students that participated in the survey. The sample was comprised of 49% female students and 51% male students. The grade level breakdown of the sample was 27% ninth grade students, 26% tenth grade students, 24% eleventh grade students, and 23% twelfth grade students.

Figure 11

The race/ethnicity breakdown of the sample was 82.6% White, 13.6% Native American, and 3.8% other, i.e., Hispanic, Black or African American, Asian or Pacific Islander, and multiple race/ethnicity. See Figure 11.

Students completed a self-administered questionnaire that included questions about tobacco use

(cigarette, cigar, and spit tobacco), exposure to environmental tobacco smoke, knowledge and attitudes about tobacco, and tobacco-use curriculum in schools.



Summary and Conclusions

Tobacco use is the single leading preventable cause of death in the United States. Cigarette smoking increases risk of heart disease; chronic obstructive pulmonary disease; acute respiratory illness; stroke; and cancers of the lung, larynx, oral cavity, pharynx, pancreas, and cervix (United States Department of Health and Human Services, 2004). If current patterns of smoking behavior persist, an estimated 19, 300 youth alive now will die prematurely from smoking-related illnesses (Hahn et al., 2002). In 2005, 28% of South Dakota high school students reported current cigarette use, compared to the national average of 23% (CDC, 2006). Of the 40 states participating in the YRBS, South Dakota has the second highest percentage of current cigarette use in the country. Oklahoma has the highest. However, South Dakota continues to make significant progress in decreasing the number of high school youth that smoke from a high of 44% in 1999.

In South Dakota, current use of spit tobacco decreased from 15% in 2003 to 13% in 2005; however, that is almost double the national average of 8% (CDC, 2006). South Dakota ranks third in the nation in relation to current spit tobacco users. In fact, the entire northern plains region of the United States is well above the national average. Montana has the highest percentage of current spit tobacco users (15%); followed by Wyoming (14%), South Dakota (13%), North Dakota (11%), and Nebraska (9%). Of the 40 states participating in the YRBS, South Dakota females had the third highest rate of current spit tobacco use in the country, behind only Wyoming and Montana.

Approximately 46% of school districts in the United States prohibit tobacco use by students, staff, and visitors in buildings, on all school property, in school vehicles, and

during school events on or off campus (Small et al., 2001). In 2005, 9% of South Dakota high school students reported smoking cigarettes in the last month on school property, compared to 7% nationally (CDC, 2006). Sixty-two percent of South Dakota high school students have been in the same room or car with someone who was smoking cigarettes in the past seven days.

The results of the South Dakota Youth Risk Behavior Survey (YRBS) offer data that are used to evaluate programmatic progress toward outcome goals and objectives and to assist communities working to reduce the harm caused by tobacco use. The YRBS also aides the South Dakota Department of Health in prioritizing services to best meet the needs of the public. The paramount objectives of the South Dakota Tobacco Control Program are to reduce the number of people that start using tobacco, reduce the number of people exposed to secondhand smoke, and increase the number of people that quit using tobacco.

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